## HARVARD MEDICAL SCHOOL THE DEPARTMENT OF PHARMACOLOGY 25 SHATTUCK ST., BOSTON 15, MASS.

July 20, 1953

Dr. Joshua Lederberg Department of Genetics University of Wisconsin Madison, Wisconsin

Dear Doctor Lederberg:

I have been tied up with other things since last November and now am thinking about coming back to this peculiar coli strain that seemed to be so mutable.

Have you had an opportunity to discover any more about it? I should be very pleased to hear what you think of it now.

Your replica plate technique proved very useful in ruling out a rather remote academic point about origin of streptomycin resistance by mutation. The argument could be made (in fact I heard Harry Eagle make it) that what fluctuates in a fluctuation test is not the specific mutation tested for, but rather the capacity to adapt after contact with various adverse media. That this is not the case is shown by replicating from a heavily-seeded master plate, simultaneously onto plates containing different antibacterial substances— e.g. streptomycin in some, phage in others. Clones resistant to streptomycin do not develop in the same position as clones resistant to phage.

I wish we had Lake Mendota here in Boston. It's hot.

With best regards,

Ávram Goldstein